17-2

## **Query Tools:**

# **Using Operators**

### **Objective**

Understand and use operators within queries

### Overview

The purpose of this document is to clarify the functions of the 'like', 'is blank', and 'in' operators available in the Query Tool Criteria and to explain the difference between Public versus Private Queries.

#### Operators

**'like'** - This operator is used to match characters. Wild cards must be used with "like" criteria. Wild cards are '\*' and '?'. The '\*' will match *any number* of characters whereas the '?' will match only *one* character.

#### Examples for ":

- ◆ Line Item Description like \*Drainage: This criteria searches every line item description that *ends* with 'Drainage'.
- ◆ Line Item Description like Drainage\*: This criteria searches every line item description that *begins* with 'Drainage'.
- ◆ Line Item Description like \*Drainage\*: This criteria searches every line item description *containing the letters* 'Drainage'.

**Note:** When possible, avoid entering a value for 'like' that may return a lot of unwanted rows (i.e.: **Line Item Description like** \*a\*).

#### Example for '?':

◆ Work Order Number like **9.804459?**: This criteria searches for every 9character work order number that begins with 9.804459.

**'is blank':** This operator allows you to select values where the value in the field is blank.

#### Example:

◆ Route Description is blank: This criteria searches every route description that has no value.

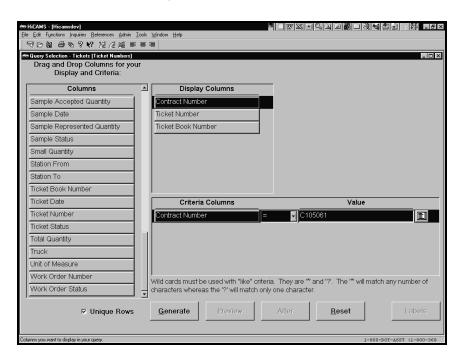
**'in':** This operator allows you to select values that match any one of a list of values.

#### Example:

◆ Sample Owner in Project;Bridge Design;Bridge Maint (use semicolons with no spaces): This criteria searches every sample owner with a value of Project, Bridge Design, or Bridge Maint.

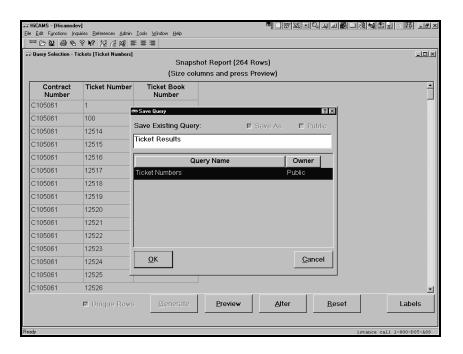
#### Public versus Private Queries

The HiCAMS Query Tool permits frequently used queries to be saved to a file for future use. Before a query can be saved, it must first be generated. To do this, access the required query, select (drag and drop) the Criteria and Display Columns, and then click the Generate Button as shown in the following example:

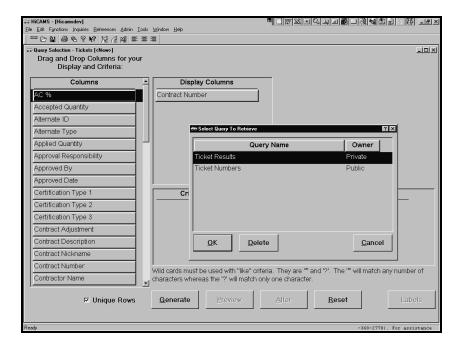


Once the window displaying the generated results appears, select the Save button on the tool bar which will display the

Save Query window. Type in the name under which you would like to save the query and click the OK button. The ability to save a public query is dependent upon security access. If the public button is not available in the upper right hand corner of the Save Query window, the query will default to private as shown in the following example:



The next time that you would like to access the saved query use the Open button, which appears as a folder on the toolbar, to open the Select Query to Retrieve window. All the queries that you saved as Private appear in addition to those saved as Public. This is shown in the following example. Select the query that you would like to access and click the OK button.



The difference between public and private queries is that private queries can only be accessed and updated by the user that created the query, whereas, public queries can be accessed by all users.